

Application No.: 10/693,649

Docket No.: 200315026-1 US (1509-461)

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. *(Currently Amended)* A method of creating a visually significant image using information encoding glyphs and an alphabet of glyphs, each different glyph glyphs having a specified different optical intensity intensities and each different glyph glyphs ~~being adapted to encode~~ having different shapes, the shapes of the glyphs encoding information, by the shape of the glyph, the method including the step of:

selecting and positioning the information encoding glyphs having the different optical intensities and different shapes so that the bulk optical properties of an aggregate of the selected and positioned glyphs create the visually significant image, ~~wherein~~ the shape of a particular glyph shape defines defining both the optical intensity and the encoding of that particular glyph.

2. *(Previously Presented)* The method as claimed in claim 1 further including creating said alphabet of glyphs.

3. *(Previously Presented)* A method as claimed in claim 1 wherein the information is encoded by symmetry properties of a plurality of glyphs.

4. *(Previously Presented)* A method as claimed in claim 1 wherein the plurality of glyphs forms a background glyph carpet.

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5. *(Currently Amended)* A method of creating a visually significant image using information encoding glyphs and a glyph alphabet wherein the each glyph is uniquely identifiable and ~~has a~~ different glyphs have different bulk optical ~~property properties~~, the method including the step of:

arranging at least a subset of said glyphs having the different bulk optical properties on a page so that in any given area, the bulk optical properties of an aggregate of said plurality of glyphs ~~forms~~ form a visually significant image or image portion.

6. *(Previously Presented)* The method as claimed in claim 5 further including defining said glyph alphabet.

7. *(Previously Presented)* The method as claimed in claim 5 further including encoding information using the shape of the plurality of glyphs.

8. *(Previously Presented)* A method as claimed in claim 3 wherein the plurality of glyphs forms a background glyph carpet.

9. *(Previously Presented)* A method as claimed in claim 8 wherein the background glyph carpet is adapted to encode the position of a unique location on a page within a logical page-space, the extent of which is defined by the specific encoding technique.

10. *(Previously Presented)* A method as claimed in claim 8 wherein the background glyph carpet is adapted to encode digital information into the visually significant image.

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11. *(Previously Presented)* A method as claimed in claim 10 wherein the encoded digital information corresponds to data relating to the image, multimedia data, textual data or any other information which can be recorded in the background glyph carpet.

12. *(Previously Presented)* A method as claimed in claim 5 wherein the encoding glyphs occupying a specified portion of the visually significant image depend on the maximum or minimum optical intensity of the resulting visually significant image.

13. *(Previously Presented)* A method as claimed in claim 5 wherein the visually significant image incorporates an optical DC offset or greyscale shrinkage, where the minimum optical intensity of the specified portion of the visually significant image is sufficiently low as to reduce the encoding possibilities below a specified useful value, whereby the encoding space in said specified portion is increased.

14. *(Currently Amended)* The method as claimed in claim 13 further including inserting additional glyphs in said portion.

15. *(Currently Amended)* A method as claimed in claim 13 wherein the DC offset preferably corresponds to applying uniform grey background on the visually significant image.

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16. *(Previously Presented)* A method as claimed in claim 12 wherein the contrast of the visually significant image is reduced, wherein the maxima and minima optical intensities of the visually significant image are such that insufficient encoding can be applied to any region.

17. *(Previously Presented)* A method as claimed in claim 5 wherein the glyphs are distinguishable by symmetry properties of the glyphs corresponding to at least one of rotation and reflection symmetry attributes.

18. *(Previously Presented)* A method as claimed in claim 5 further comprising causing optically dark glyphs to dominate the dark areas of the visually significant image, and optically light glyphs to dominate the encoding scheme in light areas of the visually significant image.

19. *(Previously Presented)* A method as claimed in claim 2 wherein the glyph alphabet is dynamically created as a function of the optical characteristics of the desired visually significant image.

20. *(Previously Presented)* A method as claimed in claim 19 wherein the dynamically created glyph alphabet is created so that at a specified level of optical resolution, aggregates of the glyphs at that specified level of optical resolution approximate the optical intensity distribution of the desired visually significant image.

21. *(Previously Presented)* A method as claimed in claim 1 wherein the glyphs are positioned so that their optical centre of gravity coincides with vertices of a grid.

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22. *(Previously Presented)* A method as claimed in claim 5 wherein the glyphs are positioned so that their optical centre of gravity coincides with vertices of a grid.

23. *(Previously Presented)* An article incorporating visually significant information and encoded information generated according to the method of claim 1.

24. *(Previously Presented)* An article incorporating visually significant information and encoded information generated according to the method of claim 5.

25. *(Currently Amended)* An encoded surface having an array of glyphs applied thereon, ~~each different glyph~~ glyphs of the array having a specified different optical intensity intensities and ~~each different glyph~~ glyphs encoding information by the shape of the glyph the different glyph shapes, the selection and position of the glyphs being such that the bulk optical properties of an aggregate of the glyphs ~~creates~~ create a visually significant image, the glyph shape of that particular glyph defining both the optical intensity and the encoding of a particular glyph.

26. *(New)* The method of claim 1 wherein the different shapes of the different glyphs are formed by differing combinations of abutting elements having the same sizes and shapes.

27. *(New)* The surface of claim 25 wherein the different shapes of the different glyphs are formed by differing combinations of abutting elements having the same sizes and shapes.